

WHAT IS CLAIMED IS:

1. An on-vehicle display device comprising:  
a display unit installed in a cabin of a vehicle for displaying information;  
a vehicle condition detection unit for detecting a current vehicle condition;  
a sitting state detection unit for detecting a passenger's current sitting state in each of seats in said cabin;  
a rearward visibility detection unit for detecting rearward visibility of a driver;  
a determination unit for determining an optimal position and an optimal direction of a display portion of said display unit on the basis of said detected vehicle condition, said detected sitting state and said detected rearward visibility; and  
a drive unit for changing a position and a direction of said display portion of said display unit on the basis of a determination result obtained by said determination unit.

2. An on-vehicle display device according to Claim 1, wherein said vehicle condition detection unit detects said current vehicle condition on the basis of

any one item selected from a group consisting of current position of said vehicle, speed of said vehicle, azimuth of said vehicle, driving gear position of said vehicle, brake condition of said vehicle, power-supply on/off condition of said vehicle, and existence of abnormality in said vehicle, or a combination of several items selected from said group.

3. An on-vehicle display device according to Claim 1, wherein said rearward visibility detection unit detects said rearward visibility of said driver due to rearward viewing directly or through a room mirror on the basis of a viewpoint position of said driver and an attachment position and an attachment angle of said room mirror.

4. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion so as to allow a passenger sitting in a rear seat to view display information on said display portion and prevent said display portion from blocking said rearward visibility of said driver through said room mirror, when it is detected that said vehicle is running and said passenger sits in said rear seat.

5. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion so as to allow all passengers sitting in rear seats to view display information on said display portion and prevent said display portion from blocking said rearward visibility of said driver through said room mirror, when it is detected that said vehicle is running and said passengers sit in said rear seats.

6. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion so as to allow a passenger sitting in an assistant driver's seat to view display information on said display portion and prevent said display portion from blocking said rearward visibility of said driver through said room mirror, when it is detected that said vehicle is running and said passenger sits in said assistant driver's seat while no passenger sits in any one of rear seats.

7. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion in

a condition that said display portion will be received in a predetermined storage place, when it is detected that said vehicle is running and no passenger sits in any one of rear seats and an assistant driver's seat.

8. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion so as to prevent said display portion from blocking said rearward visibility of said driver due to rearward viewing directly or through said room mirror, when it is detected that said vehicle is being driven backward.

9. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion so as to allow all passengers sitting in said seats in said cabin to view display information on said display portion, when it is detected that said vehicle has been parked or stopped for a predetermined time or longer and said passengers sit in said seats in said cabin.

10. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion in

a condition that said display portion will be received in a predetermined storage place, when it is detected that no passenger sits in any one of seats in said cabin.

11. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion in a condition that said display portion will be received in a predetermined storage place, when it is detected that a vehicle power supply has been turned off.

12. An on-vehicle display device according to Claim 1, wherein said determination unit determines said position and said direction of said display portion in a condition that said display portion will be received in a predetermined storage place, when abnormality is detected in said vehicle condition.